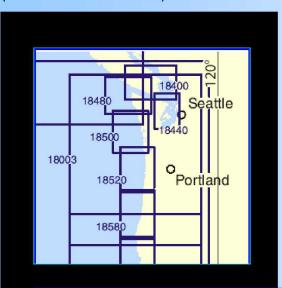
# **BookletChart**

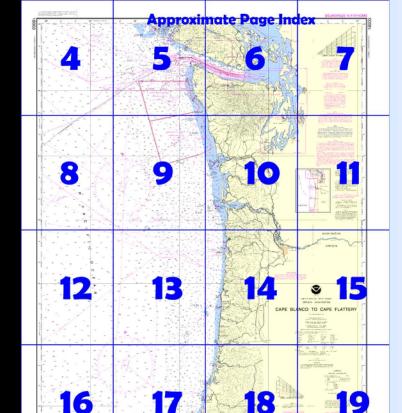
# Cape Blanco to Cape Flattery

(NOAA Chart 18003)

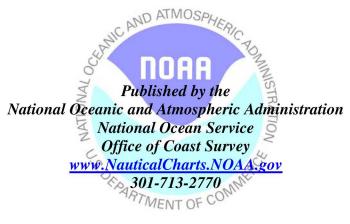


A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ Complete, reduced scale nautical chart
- Print at home for free
- ☑ Convenient size
- ☑ Up to date with all Notices to Mariners
- ☑ United States Coast Pilot excerpts
- ☐ Compiled by NOAA, the nation's chartmaker. AD ATM







### What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

### What is a BookletChart<sup>™</sup>?

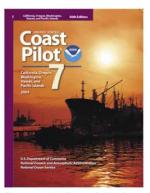
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <a href="http://www.NauticalCharts.NOAA.gov">http://www.NauticalCharts.NOAA.gov</a>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

### **Notice to Mariners Correction Status**

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



# [Coast Pilot 7, Chapter 9, 10, 11, 12 & 13 excerpts]

(1) San Francisco Bay, the largest harbor on the Pacific coast of the United States, is more properly described as a series of connecting bays and harbors of which San Francisco Bay proper, San Pablo Bay, and Suisun Bay are the largest. Depths of 29 to 40 feet are available for deep-draft vessels to San Francisco, Oakland, Alameda, Richmond, and Redwood City in San Francisco Bay proper; to Stockton on the San Joaquin River; and to

Sacramento through the lower Sacramento River and a deepwater channel. Much of the local navigation is by light-draft vessels and barges. (2) **Strait of Juan de Fuca** separates the S shore of Vancouver Island, Canada, from the N coast of the State of Washington. The entrance to the

strait lies between parallels  $48^{\circ}23'N$ ., and  $48^{\circ}36'N$ ., on the meridian of  $124^{\circ}45'W$ .

- (27) Columbia River rises in British Columbia, Canada, through which it flows for some 370 (425) miles before entering the continental United States in NE Washington. Thence it flows S to its junction with Snake River, from which it curves W and forms the boundary between the States of Washington and Oregon for the remainder of its course to the Pacific Ocean.
- (36) **Willapa Bay** entrance is 24 miles N of the Columbia River entrance. The bay is used primarily by fishing and oyster boats. No deep-draft vessels have entered Willapa Bay since 1976. Oyster beds cover much of the shoaler areas of the bay. Lumber, fish, and other sea foods are shipped by rail and truck from South Bend and Raymond.
- (66) **Cape Blanco** projects about 1.5 miles from the general trend of the coast. It is a small bare tableland, terminating seaward in a cliff 203 feet high, with low land behind it.
- (75) **Grays Harbor** entrance is about 40 miles N of Cape Disappointment and 93 miles S of Cape Flattery. The bay and its tributaries furnish an outlet to an extensive timber area. Grays Harbor is an important lumber port in the foreign and domestic trade.
- (90) **Cape Arago**, 29 miles NNE of Cape Blanco, is an irregular jagged point projecting about a mile from the general trend of the coast.
- (92) **Laguna Point**, 8.5 miles N of Point Cabrillo, is near the S end of Ten Mile River Beach.
- (94) **Coos Bay,** 33 miles N of Cape Blanco, is used as a harbor of refuge and can be entered at any time except in extreme weather. Coos Bay is one of the most important harbors between San Francisco and the Columbia River, and one of the largest forest products ports in the world. (114) **Victoria Harbor,** landlocked and well protected, is about 2 miles ESE of Esquimalt Harbor, and can accommodate large vessels. A U.S. Immigration station is in Victoria.
- (130) **Seattle**, the largest and most important city in the Northwest and one of the major ports of the Pacific Coast, extends as a densely populated greater metropolitan area from Everett, the city to its N, almost to Tacoma, the major city to the S, and E beyond the limits of Lake Washington and its shores.
- (147) **Umpqua River** is entered 20 miles N of Cape Arago Light. Some lumber, sand, crushed rock, and oil are barged on the river, but commercial traffic is very light. The **customs port of entry** is at Coos Bay.
- (209) **Cape Flattery,** a bold, rocky head with cliffs 120 feet high, rises to nearly 1,500 feet about 2 miles back from the beach.
- (224) **Portland,** on Willamette River about 9 (10.4) miles from its mouth, is the principal city of the Columbia River system and one of the major ports on the Pacific coast. The port has over 25 deep-draft piers and wharves on both sides of the Willamette River between its junction with the Columbia and Ross Island.
- (227) **Cape Foulweather** is a prominent headland with about 6 miles of seaward face consisting of rocky cliffs over 60 feet high. The cape is formed by several grass-covered headlands, separated by densely wooded gulches.
- (257) **Cape Meares**, 48 miles N of Yaquina Head, is high and rocky, with a 2-mile-long seaward face. The N part is the higher, with nearly vertical cliffs 640 feet high. The W point is narrow, covered with fern and brush, and terminates seaward in a cliff 200 feet high.
- (299) Tillamook Head, 76 miles N of Yaquina Head, ends in two points which are 0.5 mile apart.
- (419) **Tacoma,** the second city in size and importance on the sound, occupies the S and SW shores of Commencement Bay, and its residential area has grown N into Seattle's S suburbs, and to Steilacoom on the SW. (432) **Bellingham Bay,** from William Point to the head, is about 12 miles long and 3 miles wide.
- (467) The **Strait of Georgia** extends some 115 miles NW from its S end, in the vicinity of Alden Bank, and is bordered on the W by Vancouver Island, B.C., and on the E by the mainland of Canada.

  General depths are great and in many places exceed 200 fathoms.

Corrected through NM Nov. 04/06 Corrected through LNM Oct. 24/06

### HEIGHTS

Heights in feet above Mean High Water.

# CAUTION SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and sub-marine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in derths of become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or without the control of the control of

### POLLUTION REPORTS

Report all spills of oil and hazardous sub-stances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

### CAUTION

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

((Accurate location) o(Approximate location)

### NOTE B

Mariners should use caution as naval craft may be maneuvering within the areas. For further information consult U.S. Coast Guard Local Notice to

### CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

Mercator Projection Scale 1:736,560 at Lat. 46°00'

North American Datum of 1983 (World Geodetic System 1984)

SOUNDINGS IN FATHOMS AT MEAN LOWER LOW WATER

### AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

### NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

### **Table of Selected Chart Notes**

### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

A Cooperative Vessel Traffic Services (CVTS) system has been established by the United States and Canada within the adjoining waters in the Juan de Fuca Region. The appropriate Vessel Traffic Center (VTC) (Tofino Traffic, Seattle Traffic, Vancouver Traffic) administers the rules issued by both nations, however, it will enforce only its own set of rules within its jurisdiction.

### NOTE F

NOTE F

Acoustic sensors, consisting of a concrete anchor and tethered instrument package floating above the anchor, are positioned approximately 100 yards apart along the line. The depth of the floating portion of the instrument varies with local bottom depth. For instruments anchored at less than 150m depth (near shore), the floating portion of the instrument is within 5m of the bottom. For instruments anchored at 150m depth or greater, the instrument package is tethered approximately 150m below the water surface.

### PRINT-ON-DEMAND CHARTS

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafik, offer this chart
updated weekly by NOAA for Notices to Mariners and
critical corrections. Charts are printed when ordered
using Print-on-Demand technology. New Editions are
available 5-8 weeks before their release as traditional
NOAA charts. Asky our chart agent about Print-on-Demand
charts or contact NOAA at 1-800-584-4683,
http://NauticalCharts.gov, help@NauticalCharts.gov, or
CoeanGrafix at 1-877-56CHART, http://OceanGrafix.com,
or help@OceanGrafix.com.

### MAGNETIC VARIATION

Magnetic variation curves are for 2006 derived from 2005 World Magnetic Model and accompanying secular change. If annual change is in same direction as variation it is additive and the variation is increasing. If annual change is opposite in direction to variation it is subtractive and the variation is decreasing.

### AREA TO BE AVOIDED

In order to reduce the risk of a marine casualty and

### RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

### WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

### NOTE A

NOTE A
Navigation regulations are published in Chapter 2, U.S.
Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the
regulations may be obtained at the Office of the Commander,
13th Coast Guard District in Seattle, Washington or at the
Office of the District Engineer, Corps of Engineers in
Seattle, Washington.
Refer to charted regulation section numbers.

The U.S. Coast Guard and the Pacific States/British Columbia Oil Spill Task Force endorse a system of voluntary measures and minimum distances from shore for certain commercial vessels transiting along the coast anywhere between Cook Inlat, Alaska and San Diego, California. See U.S.Coast Pilot 7 or 8, Chapter 3 for details.

### AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, National Geospatial-Intelligence Agency, and Canadian authorities.

Additional information can be obtained at nauticalcharts.noaa.gov.

### RECOMMENDED TWO-WAY ROUTE

The recommended two-way route south of the traffic separation scheme (TSS) formalizes traffic patterns where slower vessels such as tug and barge traffic and fishing vessels pass starboard to starboard. Slower moving traffic transiting eastbound should follow the route established south of the TSS and north of the recommended two-way route line depicted on the chart. Slower moving traffic transiting westbound should follow the route established south of the recommended two-way route line.

NATIONAL MARINE SANCTUARIES

National Marine Sanctuaries are protected areas, administered by NOAA which contain abundant and diverse natural resources such as marine mammals, seabirds, fishes, and tidepool invertebrates. These areas are particularly sensitive to environmental damage such as spills of oil and other hazardous materials, discharges, and groundings. Exercise particular caution and follow applicable Sanctuary regulations when transiting these areas to avoid environmental impacts. A full description of Sanctuary regulations may be found in 15 CFR Part 922 and in the Coast Pilot.

### NOTE G

NOTE G
TRAFFIC SEPARATION SCHEME
One-way traffic lanes overprinted on this chart are RECOMMENDED for use by all vessels traveling between the points involved. They have been designated to aid in the prevention of collisions in the Strait of Juan De Fuca waters, but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation Zones should not be used except for crossing purposes. When crossing traffic lanes and separation zones, use extreme caution.

Precautionary Areas have been established where major lanes merge and cross the traffic separation scheme. It is recommended that vessels proceed with caution in these areas. Wherever practical, vessels entering or leaving the system should do so at these procedures and regulations, see 33 CFR 167 and / or Traffic Separation Scheme procedures and regulations, see 33 CFR 167 and / or

Traffic Separation Scheme procedures and regulations, see 33 CFR 167 and / or Chapter 2 of the U.S. Coast Pilot.

Chapter 2 of the U.S. Coast Pilot.
For information governing the VESSEL TRAFFIC MANAGEMENT AND INFORMATION SYSTEM for the coastal waters of southern British Columbia, see National Geospatial-Intelligence Agency Publication 154, Sailing Directions (enroute) for British Columbia, and the Sailing Directions British Columbia
Coast (South Portion) Volume 1, published by the Canadian Hydrographic

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

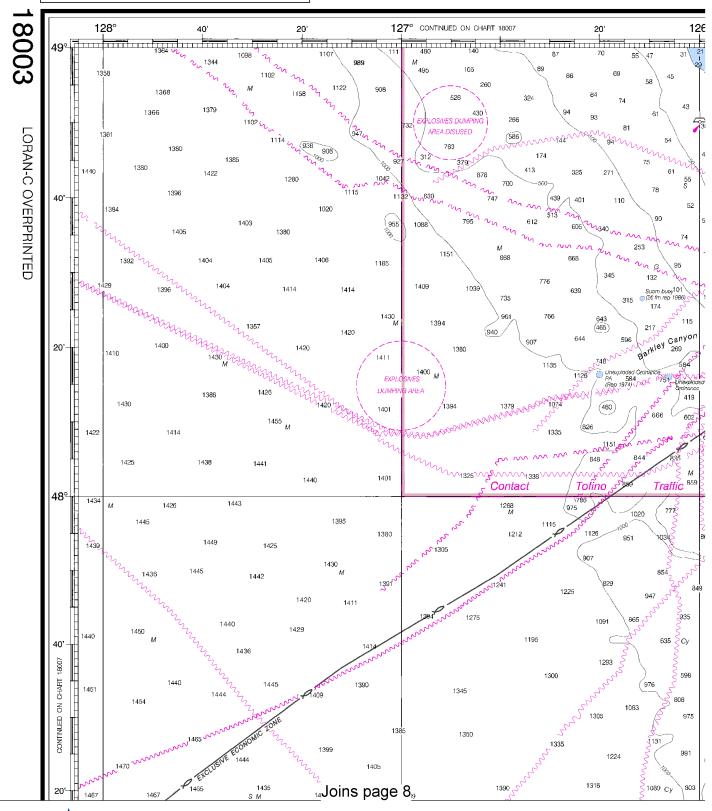
# ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

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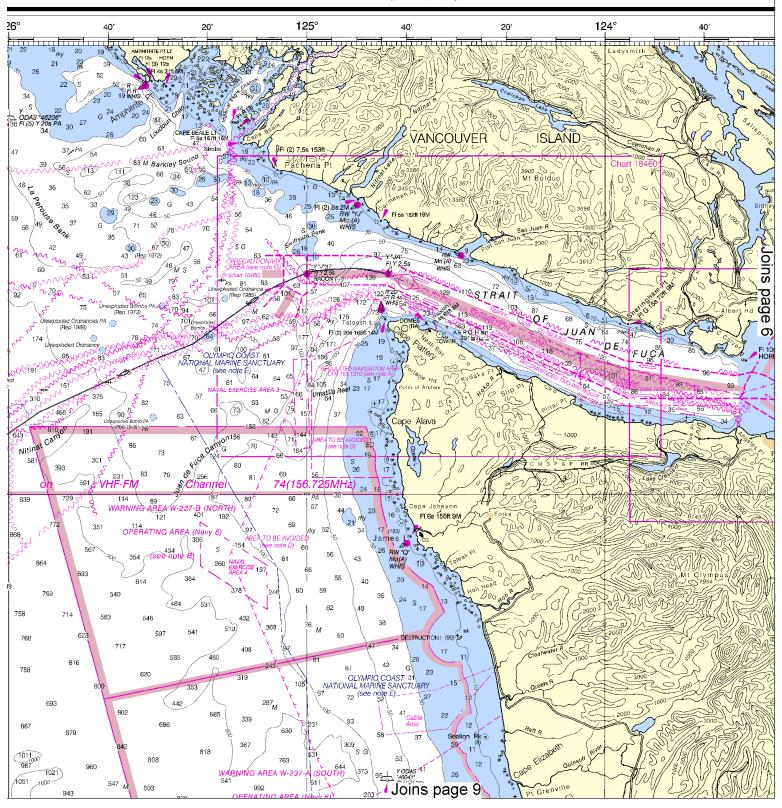
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F fixed FI flashing	MICRO TR microwave tower Mkr marker		R red Ra Ref radar reflector R Bn radiobeacon	W white WHIS whistle Y yellow
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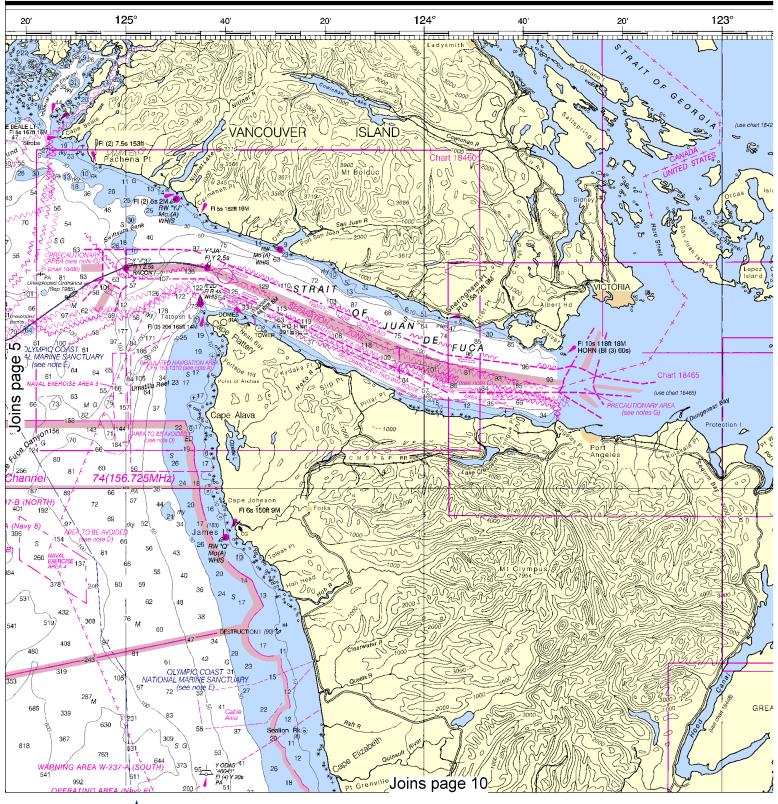
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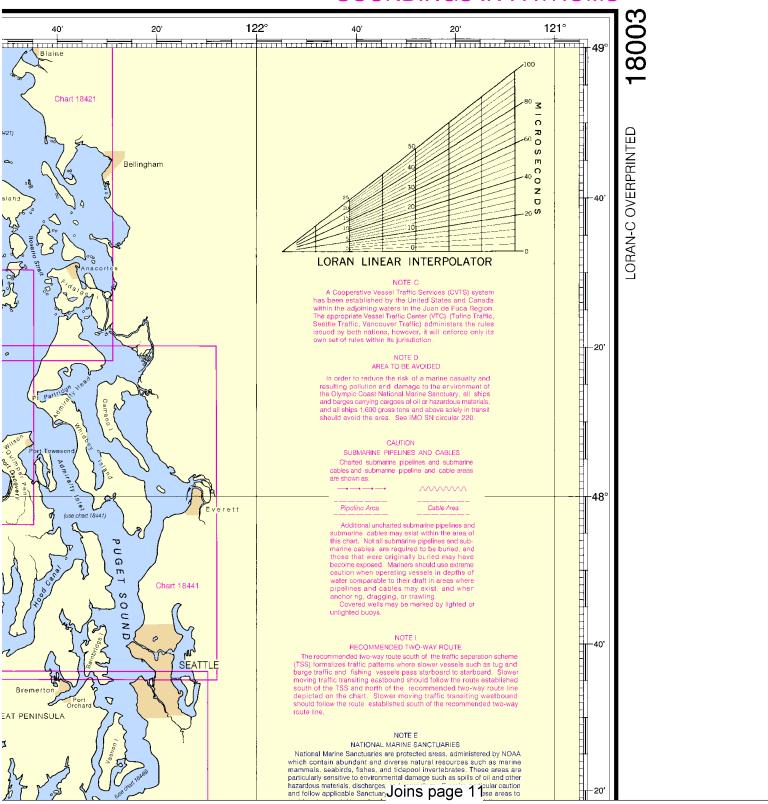
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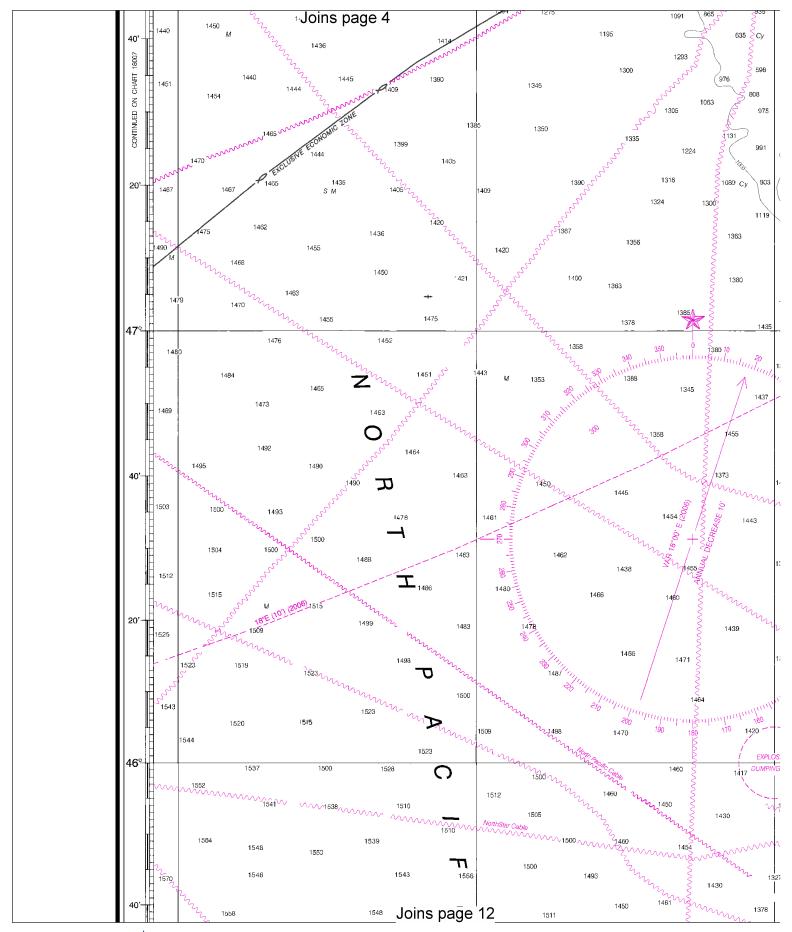




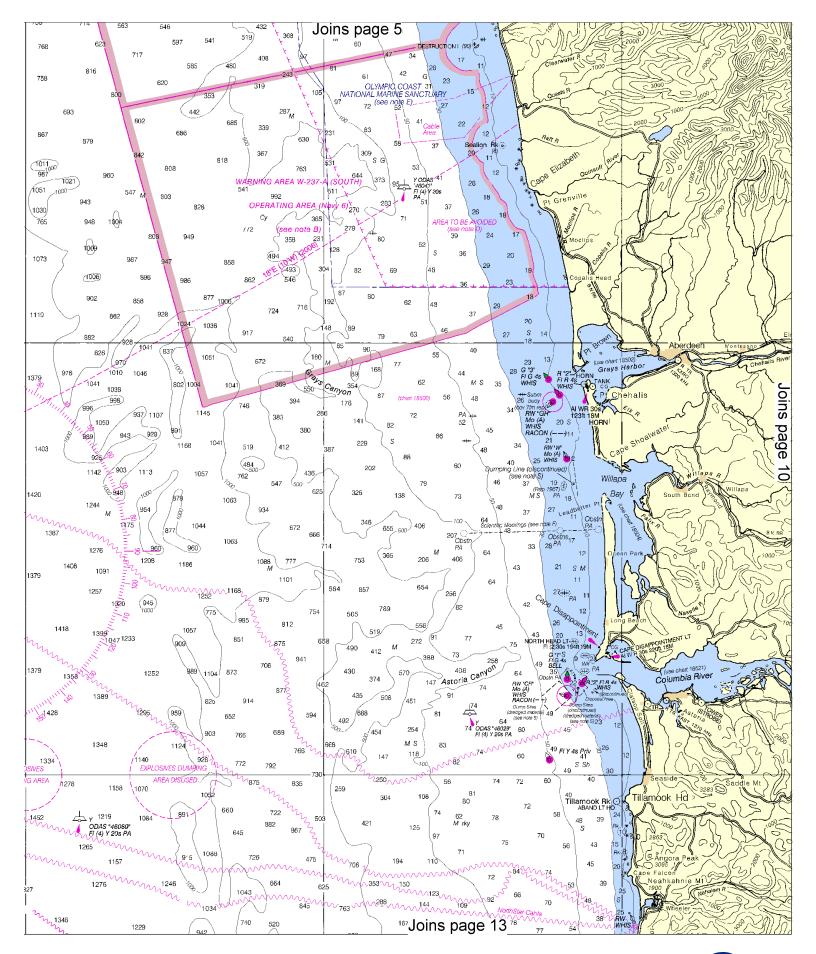


# SOUNDINGS IN FATHOMS

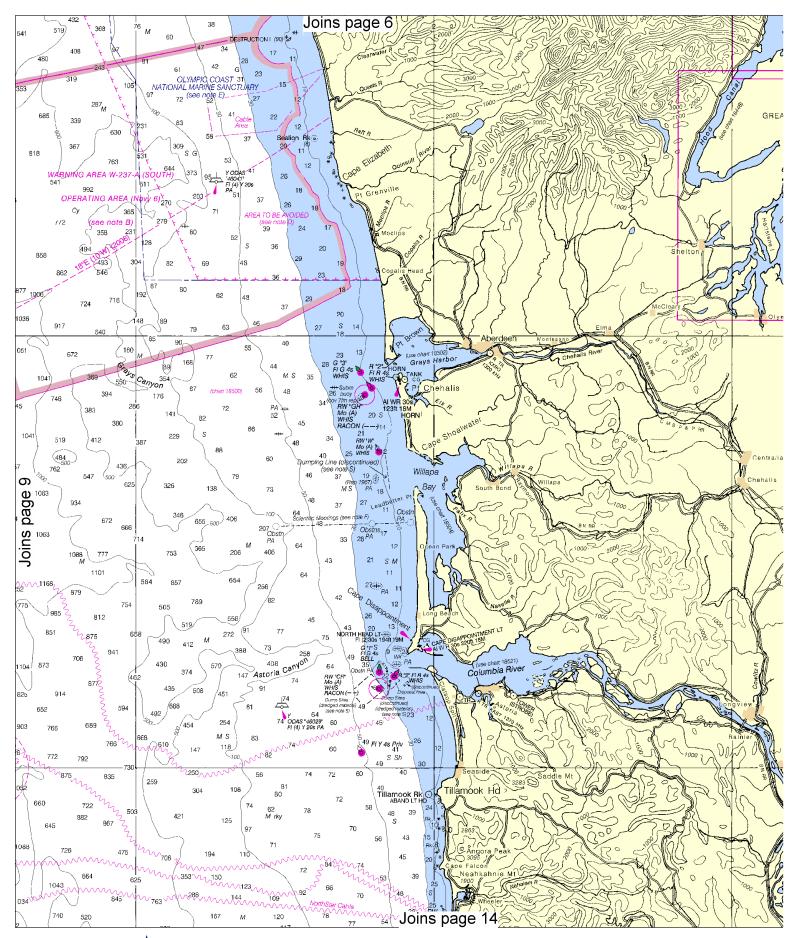






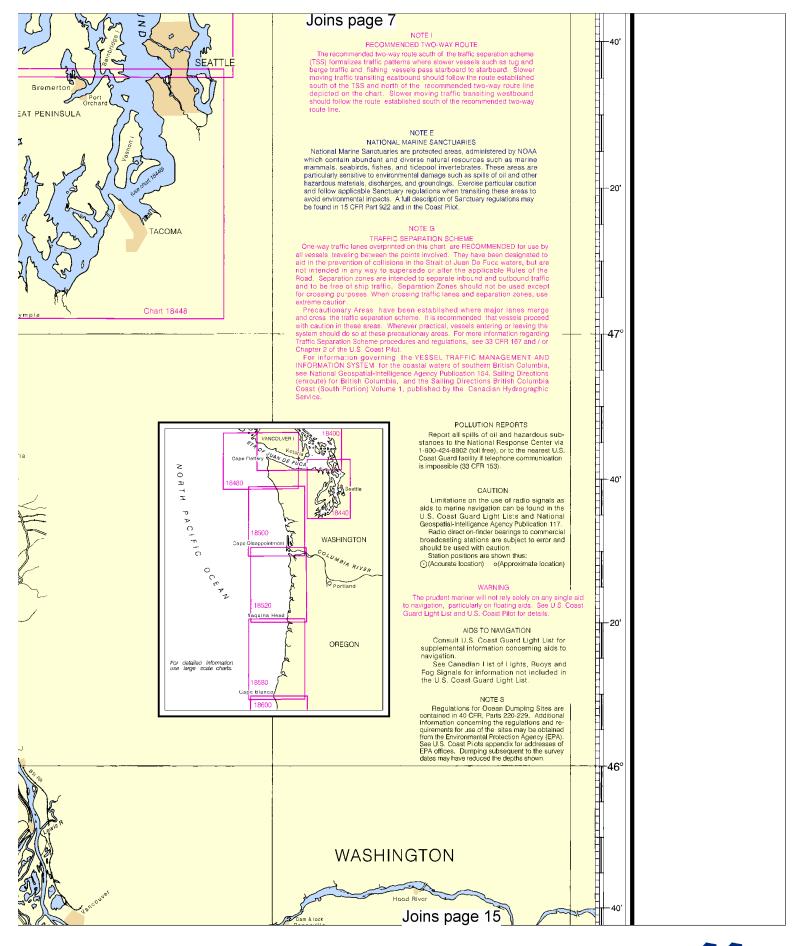


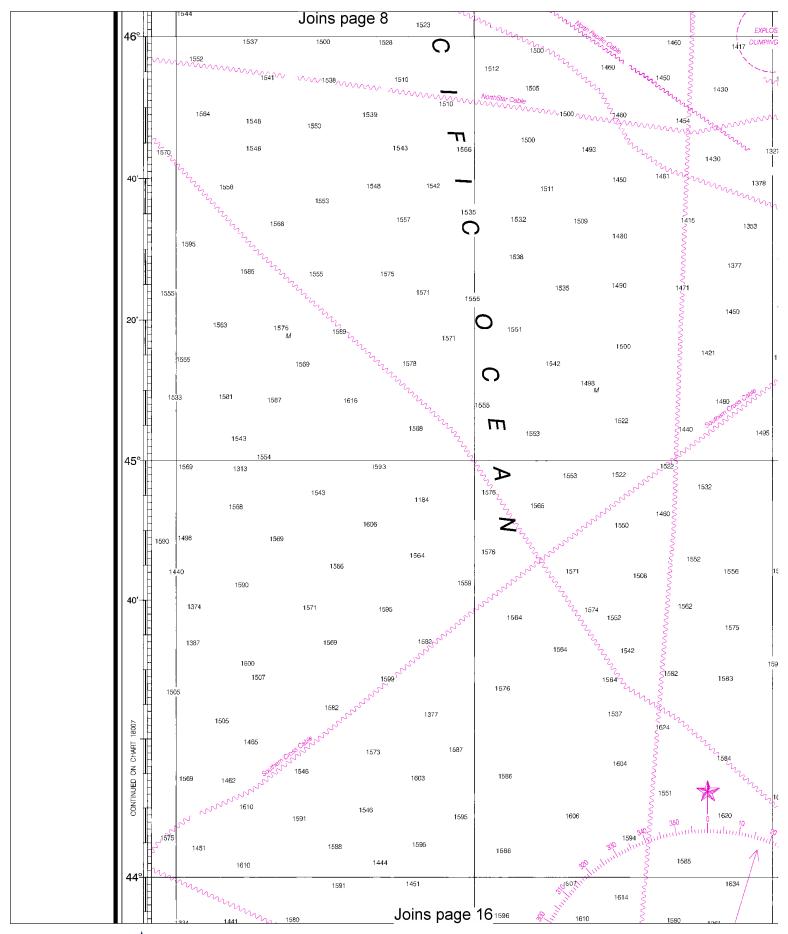




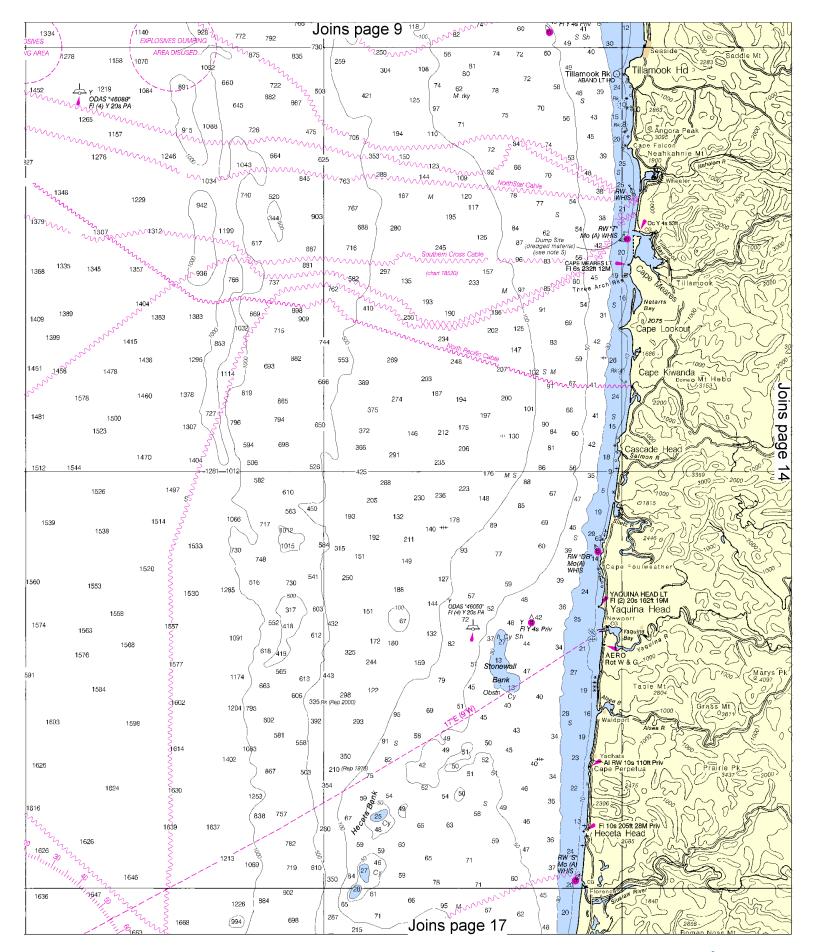


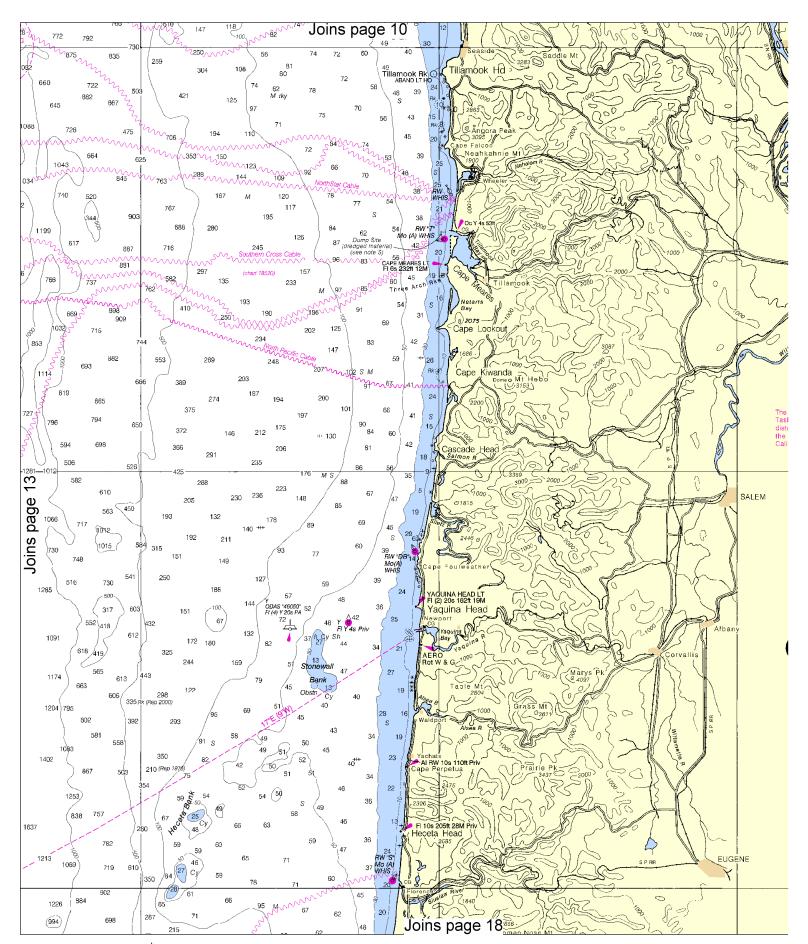






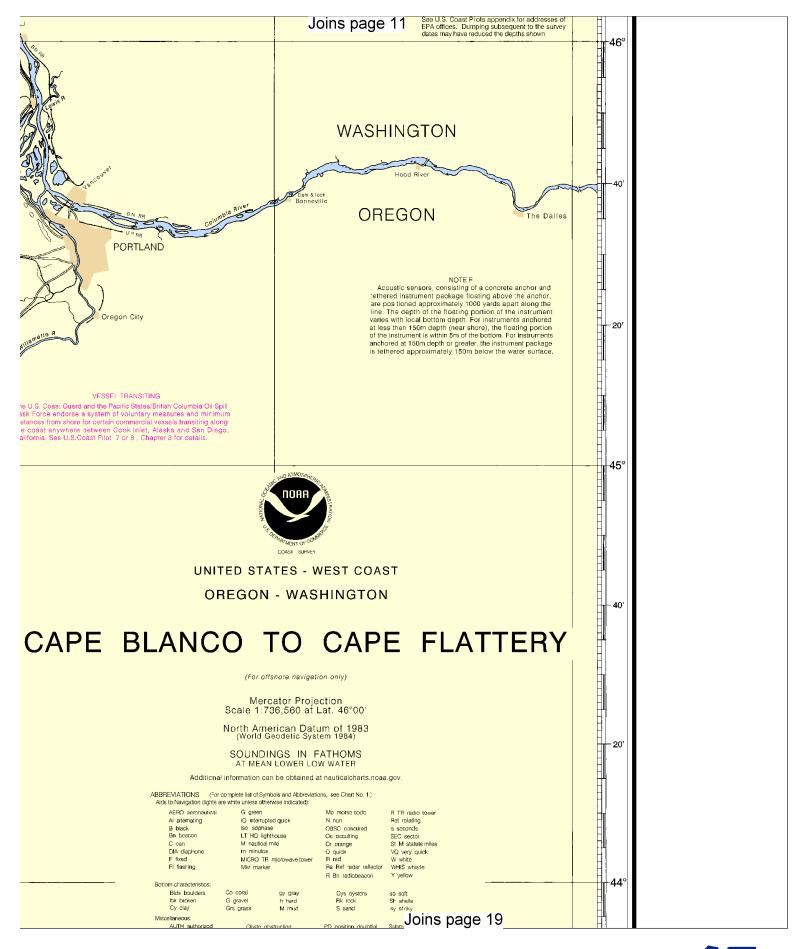


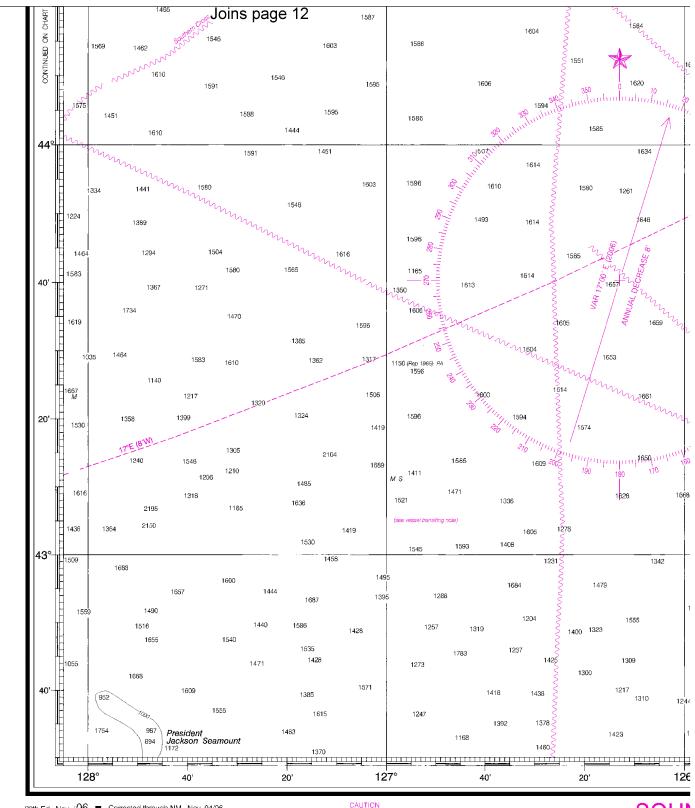












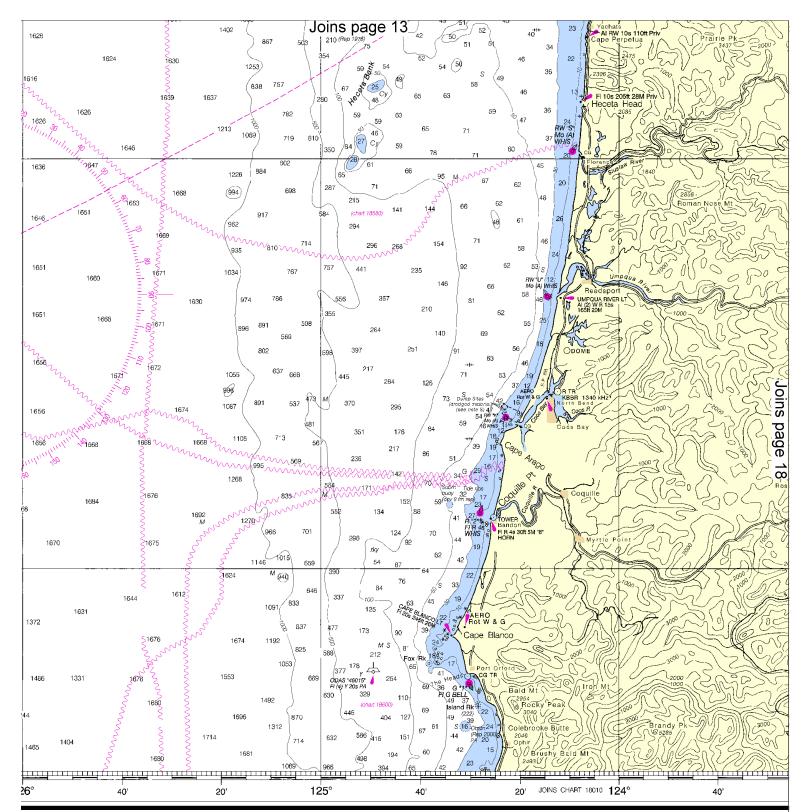
20th Ed., Nov. /06 Corrected through NM Nov. 04/06 18003

LORAN-C OVERPRINTED

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at naticalcharts noae gov.







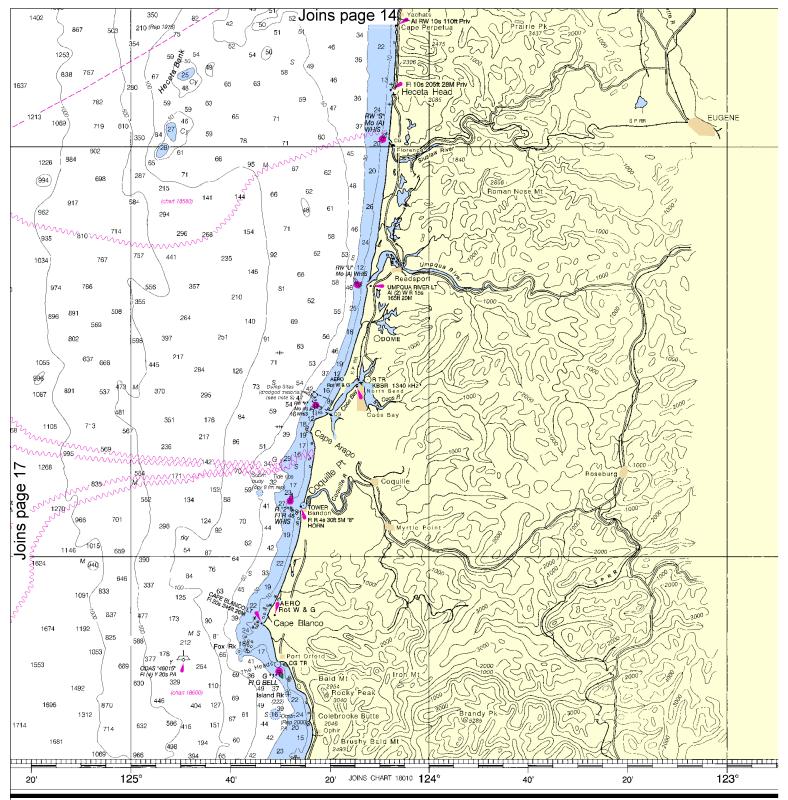
# NDINGS IN FATHOMS

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE COAST SURVEY

### PRINT-ON-DEMAND CHARTS

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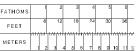
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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE COAST SURVEY

### PRINT-ON-DEMAND CHARTS

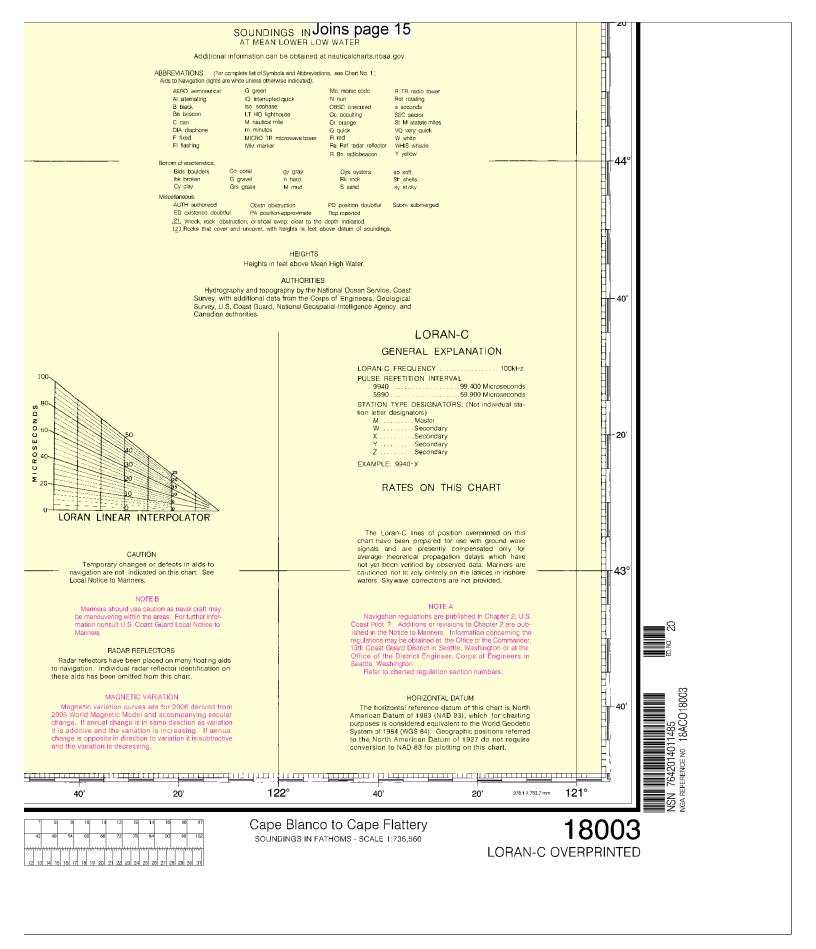
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or help@OceanGrafix.com.









## **EMERGENCY INFORMATION**

### VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

### Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

### **Distress Call Procedures**

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

### HAVE ALL PERSONS PUT ON LIFE JACKETS!!

**Mobile Phones** – Call 911 for water rescue.

Coast Guard Search & Rescue – 206-220-7001 Coast Guard Port Angeles – 360-457-4404 Coast Guard Astoria – 503-861-6211 Coast Guard North Bend – 541-756-9210 Canadian Coast Guard (RCC) – 250-363-2995 Commercial Vessel Assistance – 1-800-367-8222

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



# NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at <a href="https://www.oceanGrafix.com">www.oceanGrafix.com</a>.

# Official Electronic Navigational Charts (NOAA ENCs®) –

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

### Official Raster Navigational Charts (NOAA RNCs<sup>™</sup>) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official BookletCharts<sup>™</sup> – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is <a href="https://www.NauticalCharts.gov/bookletcharts">www.NauticalCharts.gov/bookletcharts</a>.

Official PocketCharts<sup>TM</sup> – PocketCharts<sup>TM</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is <a href="https://www.NauticalCharts.gov/viewer">www.NauticalCharts.gov/viewer</a>.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <a href="http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm">http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm</a>.

Internet Sites: <a href="https://www.Noa.gov">www.Noa.gov</a>, <a href="